

## METHOD FOR DETECTING THE END POINT OF PLASMA ETCHING PROCESS BY USING MATRIX

### ABSTRACT OF THE DISCLOSURE

5        A method for detecting the end point of plasma etching process by  
using matrix comprises a step of detecting a beginning matrix including  
emitting intensities and/or other plasma parameters of at least two  
different plasma species during beginning etching process. Then, a step  
of detecting an etching matrix is performed in which the etching matrix  
10 includes emitting intensities and/or other plasma parameters of the at  
least two different plasma species at the etching reaction. An end point  
matrix is then computed by using the beginning as well as etching  
matrices and compared to a reference end point matrix to decide whether  
the end point is reached.